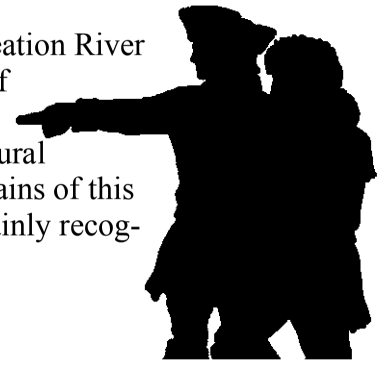
Lewis and Clark and the Missouri National Recreational River

by George Berndt, Chief of Interpretation, MNRR



Change is a constant on the free-flowing reaches of the Missouri National Recreation River (MNRR). And much has changed along Lewis and Clark's route since the Corps of Discovery traveled this part of the Missouri River almost two hundred years ago.

Both human and natural forces have altered or obliterated many historic and natural features that the party saw and described in their journals. But a good amount remains of this living river—sandbars, snags, and meanders—that the expedition would most certainly recognize.

Two of the finest are from scenic overlooks at Nebraska's Ponca State Park and Niobrara State Park. Two bridge overlooks also give travelers a clearer sense of the historic Missouri: on the Nebraska side at the Mulberry Bend Bridge connecting Vermillion, S.D., and Newcastle, Neb., and the other on the South Dakota side at the Chief Standing Bear Memorial Bridge near Running Water.

The lay of the land largely corresponds with that described in the expedition's journals and proffers a sense of being on the Great Plains. Historic locations provide good views of the river and surrounding lowlands, such as Ionia Volcano five miles north of Newcastle and The Tower (Old Baldy) about seven miles north of Lynch, Neb. Close to this round knob, Lewis and Clark saw a small animal known by its French name as *Petite Chien*. Lewis called it the "barking squirrel." We know it today as the prairie dog.

Visitors can take advantage of the scenic views from the Lewis and Clark Visitor Center operated by the U.S. Army Corps of Engineers. The corps and National Park Service provide information and interpretive services to the public about the Corps of Discovery expedition at the visitor center and at various locations along the Missouri River.

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Missouri National Recreational River Newsletter

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Photo from National Park Service Web site
This year marks the 25th anniversary of the legislation designating the lower reach of the Missouri National Recreational River that extends from below Gavins Point Dam to Ponca, Neb.

Legislation reaches 25th anniversary

It has been 25 years since legislation designated the lower reach of the Missouri National Recreational River (MNRR) as a segment of the National Wild and Scenic Rivers System.

A number of changes and accomplishments have taken place since the 1978 legislation, which authorized the Missouri National Recreational River. Changes include federal listing of three species within the MNRR-the least tern, the piping plover and the pallid sturgeon were all added to the threatened and endangered species list. Other changes include decline of forested habitat due to erosion and clearing, and the review and update of the Missouri River Master Manual. Accomplishments range from the development of general management plans for the MNRR, constructed cost-shared recreation projects, bank protection projects and environmental construction projects and the carrying out of numerous studies such as a cultural resources site survey, recreational use studies, fisheries studies, and steam boat studies.

One of the primary goals set for the next 25 years is to seek greater public, agency and Tribal awareness and involvement.

About the Missouri National Recreational River

The Missouri National Recreational River Newsletter (MNRR) is produced by the U.S. Army Corps of Engineers, Omaha District. The purpose of this newsletter is to present current information about various corps studies and construction projects on the river. The National Park Service is the overall administrator of the MNRR, however, both the corps and the park service have management responsibilities over the river. The corps is authorized to construct recreational development, bank stabilization and other recreational river features as necessary to support the values for which the river was designated.

Quick Facts (MNRR background):

- MNRR was authorized by a 1978 amendment to the National Parks and Recreation Act (PL 95-625), which amended the Wild and Scenic Rivers Act of 1968 (PL 90-542).
- MNRR has a life-of-project funding ceiling of $21 million; approximately $5 million has been spent to date.
- In 1980, the corps and National Park Service signed a Cooperative Agreement outlining each agency's responsibilities.
- The General Management Plan was updated in 1999 with an environmental emphasis. Bank protection remains a project component, primarily to protect MNRR values.

Corps photo
The construction contract for the Ponca Resource and Education Center was awarded to Channell Construction Company in September 2002. To view construction, visit www.Channellconstruction.com.

Ponca State Park Resource and Education Center nears completion

Work on the Missouri National Recreational River Resource and Education Center, located within Ponca State Park is nearing completion. The project is scheduled to be dedicated sometime in the fall of 2003.

"Enthusiastic team work across the board has helped make this project a success," says corps project manager Clyde Allen.

A cost-shared project between the corps and the Nebraska Game and Parks Commission, the Resource and Education Center consists of the following components: road design and construction by the Nebraska Department of Roads, utilities design and construction by the Nebraska Game and Parks Commission, building design and construction by the corps and an exhibit wing and exhibits funded by the National Park Service.

Also, the project has received wide support from various congressional representatives including Senators Ben Nelson, Tim Johnson, Chuck Hagel, Tom Daschle, and former senator Bob Kerry as well as Representative Doug Bereuter. Total cost of the project is estimated at $7.4 million, with $3.1 million being allotted to the building, $1.5 million set aside for exhibits and $2.8 million for dam, roads, parking, utilities and all other items.

During work on the project, a number of challenges have arisen, Allen says. One of the first obstacles is that funding through construction cost-share sources is dynamic. Another challenge is the issue with managing probable phased construction and combining four functional areas into a single facility to include administration, conferencing, interpretive display and a laboratory. Also, the facility meets a unique criteria. This too has proven to be a challenge because the project calls for a new facility and construction type for the corps design team and construction management team.

Despite obstacles, the project is headed down a steady road to successful completion, Allen says. "The state is now planning new cabins and a lodge facility to accommodate overnight stays as well as multi-day usage of the facility."

MNRR project briefs/updates

Agencies collaborate on bank protection projects

The U.S. Army Corps of Engineers, Fish and Wildlife Service, and National Park Service are working together to develop bioengineering methods for the Myron Grove (Site B-1) and Mulberry Bend (Site A-3) bank protection projects for forested habitat.

Ponca Restoration Study in progress

The Ponca Restoration draft design report and environmental assessment will be available for public review at the end of June. The output of the construction would be 35 to 40 acres of backwater habitat on state-owned land. The timing of construction is subject to funding availability.

Bighead Carp study results

The bighead carp is a "nuisance" species of fish that feeds on zooplankton (microscopic animals) and some phytoplankton (microscopic plants) and detritus (dead matter) in the water column. It's feeding pattern has the potential to reduce zooplankton and phytoplankton for larval native fish, native mussels, and other planktivorous fish (such as paddlefish). The Bighead Carp study was a two-year effort that was recently completed. If funding becomes available, the South Dakota Fish and Wildlife Service would like to engage in another year of data collection on bighead carp. Results from the recently completed study will be added to the corps' MNRR Web site at: http://www.nwo.usace.army.mil/html/pd-e/environmental.htm

Final degradation study report

The water surface levations at a discharge 30,000 cubic feet per second have dropped an average of 7 feet from 1956 to 2001. Bank erosion since dam closure is about 132 acres per year for this reach.

Magnetometer study

This study was conducted to find the locations of many sunken steamboats in the MNRR in order to avoid future construction at those sites. A report outlining the findings can be accessed on the corps' MNRR Web site.

Geomorphic assessment seeks to quantify bank retreat rates

The National Park Service is working to produce a plain-view classification and statistical analysis of the geomorphic features of the MNRR in a geographic information system (GIS) utilizing aerial photos and historic cross-section data to quantify bank retreat rates. This study will provide information to determine sites where erosion can be expected, and alternatives for remedying conditions, including easements and structures.

Wayside exhibits to showcase cultural and natural history

In a joint effort with the Trust for Public Land, the National Park Service is working to acquire (from willing sellers) properties recognized as having great resource and recreational value to showcase natural and cultural history.

Steamboat study underway

The National Park Service is producing a documented overview of steamboating, steamboat sites and broadly-defined wrecks on the MNRR. The project is scheduled to be completed this spring.

Restoration and Interpretation of Spirit Mound Historic Prairie Project

Work continues on the restoration and interpretation of the 320-acre Spirit Mound Historic Prairie Project near Vermillion, S.D. The partnership involving the Spirit Mount Trust and South Dakota Department of Game, Fish and Parks will produce wayside and trailhead exhibits interpreting the cultural and natural legacy of the site. The project is scheduled for completion this summer.

Sturgeon virus sampling

This study was conducted to develop an understanding of the naturally-occurring presence of the iridovirus in wild populations of sturgeon. Fifty shovelnose sturgeon were collected and tissue was taken from each fish and sampled for analysis.

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Check out the U.S. Army Corps of Engineers' MNRR Web site at:
http://www.nwo.usace.army.mil/html/pd-e/environmental.htm

and the National Park Service Web site at:
http://www.nps.gov/mnrr